



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/802,652	03/16/2004	Narumi Koga	501152.20026	3942

26418 7590 05/30/2006

REED SMITH, LLP
ATTN: PATENT RECORDS DEPARTMENT
599 LEXINGTON AVENUE, 29TH FLOOR
NEW YORK, NY 10022-7650

EXAMINER

SHAH, MANISH S

ART UNIT	PAPER NUMBER
----------	--------------

2853

DATE MAILED: 05/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

031

Office Action Summary	Application No.		Applicant(s)	
	10/802,652		KOGA ET AL.	
	Examiner		Art Unit	
	Manish S. Shah		2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/16/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 13-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanada et al. (# US 2003/0195275 A1) in view of Moffatt (# US 5116409).

Sanada et al. discloses a water-based ink for ink jet recording including a dispersible coloring agent ([0038]-[0042]); a propylene glycol ether ([0076]; and a surfactant, which has a general formula $R-O-(CH_2CH_2O)_n-H$ ([0080]-[0082]). They also disclose that the amount of the solvent is added is preferably 3 to 50% by weight ([0077]) and surfactant is added in amount from 0.1 to 5% ([0081]). They also disclose that the content ratio by weight of propylene glycol ether/surfactant is 5 to 10 (see Examples). They also disclose an inkjet printer including an inkjet head, which has an ink flow passage formed of an Ni alloy and which discharges ink, and the ink cartridge to accommodate the ink (figure: 8-11; [0149]).

Sanada et al. discloses all the limitation of the water-based ink except that the surfactant represented by the general formula: $R_1-O-(CH_2CH_2O)_n-SO_3M$, wherein n represents an integer of 2 to 4, R_1 represents an alkyl group having a number of carbon atoms of 12 to 15 and M represents Na or triethanolamine.

Art Unit: 2853

Moffatt teaches that to get the bleed free printed image, ink composition includes a surfactant, which has a general formula $\text{CH}_3-(\text{CH}_2)_{11}-\text{O}-\text{SO}_3-\text{Na}^+$, $\text{CH}_3-(\text{CH}_2)_n-\text{SO}_3-\text{Na}^+$ or $\text{CH}_3-(\text{CH}_2)-(-\text{O}-\text{CH}_2-\text{CH}_2-)_m-\text{OH}$ (column: 5, line: 5-25).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink composition of Sanada et al. by the aforementioned teaching of Moffatt in order to have a bleed free printed image.

2. Claims 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubota et al. (# US 648138) in view of Moffatt (# US 5116409).

Kubota et al. discloses a water-based ink for ink jet recording including a dispersible coloring agent (column: 5, line: 5-30); a propylene glycol ether; and a surfactant (column: 5, line: 50-67; column: 6, line: 1-21). They also disclose that the amount of low boiling solvent is added is preferably 0.5 to 10% by weight (column: 6, line: 5-10) and surfactant is added in amount from 0.1 to 3% (see Examples).

Kubota et al. discloses all the limitation of the water-based ink except that the surfactant represented by the general formula: $\text{R}_1-\text{O}-(\text{CH}_2\text{CH}_2\text{O})_n-\text{SO}_3\text{M}$, wherein n represents an integer of 2 to 4, R_1 represents an alkyl group having a number of carbon atoms of 12 to 15 and M represents Na or triethanolamine.

Moffatt teaches that to get the bleed free printed image, ink composition includes a surfactant, which has a general formula $\text{CH}_3-(\text{CH}_2)_{11}-\text{O}-\text{SO}_3-\text{Na}^+$, $\text{CH}_3-(\text{CH}_2)_n-\text{SO}_3-\text{Na}^+$ or $\text{CH}_3-(\text{CH}_2)-(-\text{O}-\text{CH}_2-\text{CH}_2-)_m-\text{OH}$ (column: 5, line: 5-25).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink composition of Kubota et al. by the aforementioned teaching of Moffatt in order to have a bleed free printed image.

3. Claims 13-20 are rejected under 35 U.S.C. 103(a) as being obvious over Okada et al. (# US 2003/0218661 A1) in view of Moffatt (# US 5116409).

The applied reference has a common Assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Okada et al. discloses a water-based ink for ink jet recording including a dispersible coloring agent ([0009]-[0014]; [0036]-[0040]); a propylene glycol ether

Art Unit: 2853

([0047]); and a surfactant ([0053]). They also disclose that the amount of the solvent is added is preferably 3 to 50% by weight ([0047]-[0048]) and surfactant is added in an amount from 0.1 to 5% (see Examples). They also disclose that the content ratio by weight of propylene glycol ether/surfactant is 5 to 10 (see Examples). They also disclose an inkjet printer including an inkjet head, which has an ink flow passage formed of an Ni alloy and which discharges ink, and the ink cartridge to accommodate the ink (see Abstract; [0030], [0034]).

Okada et al. discloses all the limitation of the water-based ink except that the surfactant represented by the general formula: $R_1-O-(CH_2CH_2O)_n-SO_3M$, wherein n represents an integer of 2 to 4, R_1 represents an alkyl group having a number of carbon atoms of 12 to 15 and M represents Na or triethanolamine.

Moffatt teaches that to get the bleed free printed image, ink composition includes a surfactant, which has a general formula $CH_3-(CH_2)_{11}-O-SO_3-Na^+$, $CH_3-(CH_2)_n-SO_3-Na^+$ or $CH_3-(CH_2)-(-O-CH_2-CH_2-)_m-OH$ (column: 5, line: 5-25).


It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink composition of Okada et al. by the aforementioned teaching of Moffatt in order to have a bleed free printed image.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manish S. Shah whose telephone number is (571) 272-2152. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Manish S. Shah
Primary Examiner
Art Unit 2853

MSS

5/24/06